

	Document ID	Issue Date	Pages	Title	Current OR
1	US 20040264591 A1	20041230	14	Method and system for M-QAM detection in communication systems	375/261
2	US 20040190641 A1	20040930	33	Method and system for modulating and demodulating signals in ultra-wide band (UWB) communication systems	375/261
3	US 20040131125 A1	20040708	103	Enhanced wireless packet data communication system, method, and apparatus applicable to both wide area networks and local area networks	375/261
4	US 20040091058 A1	20040513	15	QAM receiver and method for constellations having at least sixteen symbols	375/261
5	US 20040013189 A1	20040122	25	Soft slicer in a hybrid decision feedback equalizer	375/233
6	US 20030142759 A1	20030731	22	Transmission system for reduction of amateur radio interference	375/298
7	US 20030058967 A1	20030327	32	Phase detectors in carrier recovery for offset QAM and VSB	375/327
8	US 20030058955 A1	20030327	22	High-speed communications transceiver	375/265
9	US 6952458 B1	20051004	14	Demapping system and method	375/341
10	US 6904098 B1	20050607	22	Linear phase robust carrier recovery for QAM modems	375/261
11	US 6757334 B1	20040629	72	Bit rate agile third-generation wireless CDMA, GSM, TDMA and OFDM system	375/259
12	US 6665348 B1	20031216	76	System and method for interoperable multiple-standard modulation and code selectable Feher's GMSK, enhanced GSM, CSMA, TDMA, OFDM, and third-generation CDMA, W-CDMA and B-CDMA	375/259

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1		Malm, Peter et al.
2		Ojard, Eric
3		Sanderford, H. Britton JR. et al.
4		Tosato, Filippo et al.
5	375/229; 375/235; 375/261	Jayaraman, Srikant et al.
6	375/261; 375/350	Anderson, Carl William et al.
7	375/261; 375/371; 375/376	Lin, Thuji S. et al.
8	375/261	Raghavan, Sreen
9	375/253; 375/261; 714/780; 714/796	Djokovich; Igor et al.
10	375/326; 375/327; 375/350	Isaksen; David Bruce et al.
11	375/219; 375/261; 375/296; 375/298	Feher; Kamilo
12	375/130; 375/219; 375/261; 375/298	Feher; Kamilo

	Document ID	Issue Date	Pages	Title	Current OR
13	US 6651210 B1	20031118	17	Flexible multi-bit per symbol rate encoding	714/758
14	US 6633614 B1	20031014	32	Multicarrier personal access communication system	375/264

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13	375/261; 714/752; 714/774; 714/779; 714/784	Trott; Mitchell D. et al.
14	375/261; 375/295 CIPG 20060101 A H04L H04L5/0 2 L I R US M 20060101 CICL H04L CIPS H04L5/0 2 20060101 CIPG 20060101 A H04L H04L5/0 2 L I R US M 20060101 CICL H04L CIPS H04L5/0 2 20060101 CIPG 20060101 A H04L H04L25/ 03 L N R US M 20060101 CICL H04L CIPN H04L25/ 03; 20060101	Barton; Melbourne et al.

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	Document ID	Issue Date	Pages	Title	Current OR
15	US 6470055 B1	20021022	71	Spectrally efficient FQPSK, FGMSK, and FQAM for enhanced performance CDMA, TDMA, GSM, OFDN, and other systems	375/259
16	US 6449246 B1	20020910	35	Multicarrier personal access communication system	370/210
17	US 6430228 B1	20020806	14	Digital QAM modulator using post filtering carrier recombination	375/261
18	US 6313885 B1	20011106	29	DTV receiver with baseband equalization filters for QAM signal and for VSB signal which employ common elements	348/725
19	US 6259743 B1	20010710	26	Automatic constellation phase recovery in blind start-up of a dual mode CAP-QAM receiver	375/261
20	US 6141387 A	20001031	17	Digital QAM modulator using post filtering carrier recombination	375/261
21	US 6137829 A	20001024	14	System and method for transmitting special marker symbols	375/222
22	US 6104442 A	20000815	29	Radio receiver for receiving both VSB and QAM digital HDTV signals	348/725

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15	370/215; 375/219; 375/261; 375/269; 375/298; 375/308; 375/329	Feher; Kamil
16	370/206; 370/328; 370/343; 375/260; 375/261	Barton; Melbourne et al.
17	375/277; 375/298; 375/308; 375/332	Zhang; Qin
18	348/614; 348/727; 375/229; 375/261	Patel; Chandrakant B. et al.
19	375/222; 375/342	Garth; Lee McCandless
20	375/277; 375/298; 375/308; 375/332	Zhang; Qin
21	329/304; 332/103; 370/207; 375/261; 375/264; 375/269; 375/298; 375/324; 375/340; 379/93.08	Betts; William L.
22	348/726; 375/261	Patel; Chandrakant Bhailalbhai et al.

	Document ID	Issue Date	Pages	Title	Current OR
23	US 6026120 A	20000215	26	System and method for using circular constellations with uncoded modulation	375/261
24	US 5966376 A	19991012	41	Apparatus and method for digital data transmission using orthogonal cyclic codes	370/342
25	US 5878088 A	19990302	19	Digital variable symbol timing recovery system for QAM	375/324
26	US 5859877 A	19990112	22	Simultaneous analog and digital communication using fractional rate encoding	375/298
27	US 5844944 A	19981201	24	Simultaneous analog and digital communication using partitioning of bits into words	375/298
28	US 5818653 A	19981006	30	Multiple-values digital signal magnetic recording and reproducing apparatus using a QAM and PSK modulator, pilot signal and a viterbi decoder	360/32
29	US 5809062 A	19980915	10	Ambiguity resolution system in direct sequence spread spectrum modulation systems	375/144

	Current XRef	Inventor
23	375/219	Betts; William L.
24	370/441; 370/479; 375/261; 375/298; 375/358; 714/746; 714/795; 725/144	Rakib; Selim Shlomo et al.
25	329/304; 329/306; 375/260; 375/261; 375/326; 375/355; 375/371; 375/373	Knutson; Paul Gothard et al.
26	332/103; 375/261; 375/308	Betts; William Lewis et al.
27	375/261	Betts; William Lewis et al.
28	375/261	Park; Sam-yong et al.
29	375/145; 375/261; 375/279; 375/298; 375/325; 375/329; 375/343	Hulbert; Anthony Peter

	Document ID	Issue Date	Pages	Title	Current OR
30	US 5805583 A	19980908	45	Process for communicating multiple channels of digital data in distributed systems using synchronous code division multiple access	370/342
31	US 5751774 A	19980512	25	Transmission system for digital audio broadcasting	375/367
32	US 5684834 A	19971104	22	Simultaneous analog and digital communication using fractional rate encoding	375/298
33	US 5608755 A	19970304	36	Method and apparatus for implementing carrierless amplitude/phase encoding in a network	375/219
34	US 5588022 A	19961224	10	Method and apparatus for AM compatible digital broadcasting	375/216
35	US 5537441 A	19960716	21	Controlled simultaneous analog and digital communication	375/261
36	US 5537436 A	19960716	30	Simultaneous analog and digital communication applications	375/222
37	US 5535245 A	19960709	22	Modulation/demodulation circuit for a digital signal recorder/reproducer	375/261

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30	370/335; 370/347; 370/441; 370/479; 375/261; 375/298; 375/358	Rakib; Selim Shlomo
31	370/509; 370/515; 370/522; 375/261; 375/298; 375/364	Wang; Jin-Der
32	375/261	Betts; William Lewis et al.
33	370/201; 375/261	Rakib; Selim
34	375/260; 375/261; 375/279; 375/298; 375/308; 375/329; 375/340	Dapper; Mark J. et al.
35	370/206; 375/222; 379/93.08	Bremer; Gordon et al.
36	375/261; 455/553.1; 455/557	Bottoms; Stanley et al.
37	329/304; 332/103; 360/29; 375/264; 375/324; 386/124	Kim; Soon T.

	Document ID	Issue Date	Pages	Title	Current OR
38	US 5506636 A	19960409	33	HDTV signal receiver with imaginary-sample-presence detector for QAM/VSB mode selection	348/725
39	US 5495203 A	19960227	20	Efficient QAM equalizer/demodulator with non-integer sampling	329/306
40	US 5471508 A	19951128	41	Carrier recovery system using acquisition and tracking modes and automatic carrier-to-noise estimation	375/344
41	US 5448555 A	19950905	29	Simultaneous analog and digital communication	370/206
42	US 5440585 A	19950808	28	Applications of simultaneous analog and digital communication	375/261
43	US 5287351 A	19940215	21	Method and apparatus for minimizing error propagation in correlative digital and communication system	370/206
44	US 5222144 A	19930622	14	Digital quadrature radio receiver with two-step processing	381/15
45	US 5005186 A	19910402	44	Digital demodulator apparatus	375/328
46	US 4961206 A	19901002	31	Data modem system	375/261
47	US 4924492 A	19900508	21	Method and apparatus for wideband transmission of digital signals between, for example, a telephone central office and customer premises	379/93.08

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38	348/726; 375/261	Patel; Chandrakant B. et al.
39	329/307; 348/641; 348/727; 375/261; 375/328	Harp; Jeffrey C. et al.
40	375/261; 455/226.3	Koslov; Joshua L.
41	329/304; 332/103; 370/286; 375/222; 375/261	Bremer; Gordon et al.
42	375/222	Partridge, III; B. Waring
43	370/506; 375/261	Wall, Jr.; William E.
44	375/261; 375/320; 375/327; 375/328; 375/340	Whikehart; J. William
45	329/304; 375/261	Aono; Yoshihito et al.
46	375/328; 375/340; 375/344; 375/373	Tomlinson; Martin et al.
47	370/286; 375/223; 375/230; 375/234; 375/261; 714/792	Gitlin; Richard D. et al.

	Document ID	Issue Date	Pages	Title	Current OR
48	US 4901333 A	19900213	18	Data transmission systems	375/345
49	US 4849703 A	19890718	16	Method and apparatus for generating a data sampling clock locked to a baud clock contained in a data signal	327/160
50	US 4808937 A	19890228	15	Phase-locked loop for a modem	327/159
51	US 4780884 A	19881025	10	Suppressed double-sideband communication system	375/261
52	US 4646326 A	19870224	9	QAM modulator circuit	375/261
53	US 4521878 A	19850604	16	Data transmitting-receiving system	370/203
54	US 4489418 A	19841218	13	Differential encoding technique	375/246
55	US 4024342 A	19770517	15	System for detecting digital data transmitted by modulating a carrier	375/235
56	US 3988539 A	19761026	17	Data transmission system using optimal eight-vector signaling scheme	375/269
57	US 3978407 A	19760831	15	Fast start-up adaptive equalizer communication system using two data transmission rates	375/231

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48	370/286; 375/222; 375/261	Hodgkiss; William
49	327/166; 327/299; 327/98; 375/222; 375/223; 375/261; 375/376; 375/377	Easley; Matthew F. et al.
50	327/160; 375/222; 375/223; 375/261; 375/376; 375/377; 379/93.28	Correa; German E. et al.
51	370/206; 375/270; 375/301	Karabinis; Peter D.
52		Backof, Jr.; Charles A. et al.
53	370/206; 375/261; 455/60	Toyonaga; Noriyasu
54	375/260; 375/261	Mazo; James E.
55	375/261; 375/269	Croisier; Alain et al.
56	375/261; 375/280; 375/284	Motley; David M. et al.
57	327/100; 333/18; 375/235; 375/261; 380/268; 455/355	Forney, Jr.; George D. et al.

	Document ID	Issue Date	Pages	Title	Current OR
58	US 3971996 A	19760727	22	Phase tracking network	327/233

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58	375/261	Motley; David M. et al.